

CONTENTS

SECTION 1 GENERAL

Group 1 Safety Hints	1-1
Group 2 Specifications	1-10

SECTION 2 STRUCTURE AND FUNCTION

Group 1 Pump Device	2-1
Group 2 Main Control Valve	2-17
Group 3 Swing Device	2-46
Group 4 Travel Device	2-57
Group 5 RCV Lever	2-72
Group 6 RCV Pedal	2-79

SECTION 3 HYDRAULIC SYSTEM

Group 1 Hydraulic Circuit	3-1
Group 2 Main Circuit	3-3
Group 3 Pilot Circuit	3-6
Group 4 Single Operation	3-14
Group 5 Combined Operation	3-24

SECTION 4 ELECTRICAL SYSTEM

Group 1 Component Location	4-1
Group 2 Electric Circuit	4-3
Group 3 Electrical Component Specification	4-23
Group 4 Connectors	4-37

SECTION 5 MECHATRONICS SYSTEM

Group 1 Outline	5-1
Group 2 Mode selection System	5-3
Group 3 Automatic Deceleration System	5-6
Group 4 Power Boost System	5-7
Group 5 Travel Speed Control System	5-8
Group 6 Automatic Warming Up System	5-9
Group 7 Engine Overheat Prevention System	5-10
Group 8 Variable Power Control System	5-11

Group 9 Attachment Flow Control System	5-12
Group 10 Boom Floating Control System	5-13
Group 11 Intelligent Power Control System	5-14
Group 12 Anti-Restart System	5-16
Group 13 Self-Diagnostic System	5-17
Group 14 Engine Control System	5-72
Group 15 EPPR (Electro Proportional Pressure Reducing) Valve	5-73
Group 16 Monitoring System	5-76
Group 17 Fuel Warmer System	5-118
Group 18 1 or 2-Way Optional Piping Pressure Removal System	5-119
Group 19 2DMG+ System	5-120

SECTION 6 TROUBLESHOOTING

Group 1 Before Troubleshooting	6-1
Group 2 Hydraulic and Mechanical System	6-4
Group 3 Electrical System	6-25
Group 4 Mechatronics System	6-43
Group 5 Air con & Heater System	6-71

SECTION 7 MAINTENANCE STANDARD

Group 1 Operational Performance Test	7-1
Group 2 Major Components	7-21
Group 3 Track and Work Equipment	7-29

SECTION 8 DISASSEMBLY AND ASSEMBLY

Group 1 Precaution	8-1
Group 2 Tightening Torque	8-4
Group 3 Pump Device	8-8
Group 4 Main Control Valve	8-51
Group 5 Swing Device	8-64
Group 6 Travel Device	8-97
Group 7 RCV Lever	8-127
Group 8 Turning Joint	8-141
Group 9 Boom, Arm and Bucket Cylinder	8-146
Group 10 Undercarriage	8-167
Group 11 Work Equipment	8-179